1ST & Final Bill BRNo-02 18/05/2022 No:

Original/Duplicate/Triplicate
CONTRACT CERTIFICATE
(For Other Works)

SBRNo-02 18/05/2022 Date:

Division: **R.R Nagar** Electrical

Sub- Division: **R.R Nagar, Electrical**

Bill Received No.....Dated.....Cash Book Voucher No.....dated.....

Scheduled Docket No.

Name of Work (as per sanctioned estimate): **Providing high intensity illumination to Ayyappa temple junction, Sahithyakoota junction, Bel circle u-turn, Muthyalanagara junction BFW junction and Rajagopal circle of ward No-16 Jalahalli under RR nagara zone.**

Name of Contractor and Full Adress: **M/S Niharika Electricals, Prop. Dilip J, No.25/1, 19th C main road Muneshwara Block Bangalore-560026.**

Work order No : EE/ELE/RRN/W.O/ 18 /2021-22 Dtd:28/12/2021 **Budget Head:** P0300

Reference to Agreement :18/2021-22 Dtd:28/12/2021 **Job Code:016-21-000009**

Certified that the measurements were taken by me on 5/4/2022 and recorded of page nos 372101 to 372111 of measurement Book No 3722/21-22 and that the work is satisfactorily executed.

For Niharika Electricals

Contractor

Proprietor

Proforma Invoice - 714058/-
CGST@6% - 42,844/-
SGST@6% - 42,844/-

Officer in charge of work

Certified that the measurements were checked by me on 5/4 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in columns 3 of Account II have been actually brought to Site of the work and the contractor has not previously received any advance on this security. These materials are of an imperishable nature and are all required for immediate use on the work in the connection with item for finished work have been agreed upon and normal agreement signed and executed by the contractor is recorded in the the office

AS 5/4.

Sub-division Officer

II Memorandum of Payment

1) Total value of work done or supplies as per account within — ₹ 7,99,746=00/-
2) Deduct amount to be held in reserve being .....percent Rs.....
3) " Balance
4) Deduct payment :
   a) Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D.No.....
      Amount adjusted towards cash advance recovery of
   b) Payments cost store or other material supplied.
      Now made recovery amount creditable to this/ other work
      Amount paid on this bill cheque/cash
   c) Balance being unpaid value of work done held in reserve
5) Deduct cash advance made on the Office Cash Book Voucher No..... dated.....less adjustments
6) Net amount due to or from contractor
   Unadjusted items
7) Advance to contractor for materials brought to site (as detailed) within
   Value of Government materials supplied

Adjustments Details

T	7997=00/-
CGST	7141=00/-
SGST	7141=00/-
CBF	800=00/-
SD	—
C	7997=00/-
INF	—
OTHERS	—
TOTAL	30,276=00/-
NETT	7,68,670=00/-

For Niharika Electricals

Contractors Signature

Received Rs.....(in words)
.....
by cash and adjustment of payment as per memorandum.

Witnesses :
1.
2.

For Niharika Electricals

Dated .....Signature of contractor

Proprietor

Paid by me by cheque No.....Dated .....
Cash Rs.....Dated.....

Stamp

Proprietor

(For use in the office)
Net Cheque for Rs. 7,99,746/- Only
Net Cheque Rs. 7,68,670/- Only
Adjustment Rs. 30,276/- Only
Rs in Words Seven lakhs Ninety Eight thousand Six hundred Seventy Only

Initials of Officer making payment

Executive Engineer (Ele)

			Previous Measure		Present Measurement			Total Up to date	
	Items Grouped under sub Heads and sub works of the Estimate	Unit	Qty	Cost	Qty	Rate Rs Ps	Amount Rs ps	Qty	Cost
A	**Providing high intensity illumination to Ayyappa temple junction, Sahithyakoota junction, Bel circle u-turn, Muthyalanagara junction BFW junction and Rajagopal circle of ward No-16 Jalahalli under RR nagara zone.**								
1	Part A KSRB 2-2 : Earthwork excavation by manual means for foundation of buildings, water supply and sanitary lines and electrical conduits etc, either in pits or in trenches 1.5m and above in width, in soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. including breaking of clods complete as per specifications. KSRB 2-2.2 : -d o - in hard soil. No. KBS 2.1 (b) / 2.3.5 (0.8*0.8*1.2) Mtr Per Foundation for Octagonal pole	Cum			3.072	226.0	694.00	3.072	694.00
2	Part A KSRB 4.2.2 : Providing and laying in position reinforced cement Cum concrete of Design Mix M20 with OPC @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to IS 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6	Cum			2.704	3542.0	9578.00	2.704	9578.00
3	Part A KSRB 4-1.3 : Providing and laying in position plain cement concrete Cum of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2	Cum			0.112	2354.0	264.00	0.112	264.00
4	Part A KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specification No. KBS 4.6.3 TMT bars Fe 550	Kg			80	70.0	5600.00	80	5600.00

For Nirmika Electricals
Proprietor

	Items Grouped under sub Heads and sub works of the Estimate	Unit	Previous Measure		Present Measurement			Total Up to date	
			Qty	Cost	Qty	Rate Rs Ps	Amount Rs ps	Qty	Cost
5	Part A Supply of LED floodlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/clear glass material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/ IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in- house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source. LED Floodlight 150 W,	Each			12	6989.0	83868.00	12	83868.00
6	Part A Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments. 16 sqmm.	Per Mtr			15	36.0	540.00	15	540.00
7	Part A Supplying and drawing Flexible Multicore Cable manufactured with electrolytic grade flexible copper with low conductor confirming to IS:8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100Volts as per IS-694:1990, 3C X 4Sq.mm,	Per Mtr			32	54.0	1728.00	32	1728.00
8	Part A Supplying and fixing of solar lux level street light control switch single phase including suitable capacity contactor 3 KW	Each			6	4361.0	26166.00	6	26166.00
9	Part A Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 40 Amps DP.	Each			6	856.0	5136.00	6	5136.00

I/C

AEE (Elec.)

	Items Grouped under sub Heads and sub works of the Estimate	Unit	Previous Measure		Present Measurement			Total Up	
			Qty	Cost	Qty	Rate Rs Ps	Amount Rs ps	Qty	Cost
10	Part A Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete. 16 SWG. (Item No. -5.42.2, Page No.30) (PW,P&IWTD- Ele SR 2019-20)	sq.cms			79800	0.35	27930 00	79800	27930.00
11	Part A Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. 40x40x6mm,	Per Mtr			24	89.0	2136 00	24	2136.00
12	Part A Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV. 40 MM	Per Mtr			16	126.0	2016 00	16	2016.00
13	Part A Supplying fixing and wiring earth electrode for grounding of lifts, transformers, DG sets etc. using 40mm dia 2.9mm thick 2.5 mtr long GI pipe with GI funnel with mesh and suitable size reducer fixed on the top of the earth electrode. The funnel should be enclosed in a CC chamber of 400x400x400mm with a cast iron cover. The earth electrode shall have staggered holes of 12mm dia and the electrode should be covered 150mm all-round with alternate layers of salt and charcoal from the bottom of the CC chamber. The connection from the electrode is to be established through GI strip using GI bolts and nuts.	No			8	3654.0	29232 00	8	29232.00
14	Part A Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. 100 Amps	Each			12	198.0	2376 00	12	2376.00
15	Part A Supplying and fixing hylum plastic sheet 3mm thick with necessary nitches for fixing switches, regulators etc., and fixing on existing wood or metal box using N.F. screws.	Sq Cm			14900	0.24	3576.00	14900	3576.00
16	Part A Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm	Mtr			248	85.0	21080.00	248	21080.00
17	Part A Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. In existing trench/duct. 6 sqmm to 16 sqmm	Mtr			248	11.88	2946.00	248	2946.00
18	Part A Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) In soil (hard)	Mtr			196	26.0	5096.00	196	5096.00

	Items Grouped under sub Heads and sub works of the Estimate	Unit	Previous Measure		Present Measurement			Total Up to date	
			Qty	Cost	Qty	Rate Rs Ps	Amount Rs ps	Qty	Cost
19	Part A Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) Asphalt cutting	Mtr			50	58.0	2900 00	50	2900.00
20	Part A Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.16 sqmm	Each			4	75.0	300 00	4	300.00
21	Part A Supplying and fixing of heavy duty cable glands suitable for UG cable of 1.1 KV class (metal only) 32mm dia	Each			8	54.0	432 00	8	432.00
22	Part A Supply and laying double walled corrugated (DWC) HDPE Pipe including all necessary connecting Sockets/Couplings/Tees/Bends/End-caps of same materials in existing trench as per IS 14930 part -II suitable for drawing underground cables. 50mm OD / 38mm ID	Mtr			150	85.0	12750 00	150	12750.00
23	Part A Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes. 16 sqmm	Each			16	12.44	199 00	16	199.00
24	Part A Supplying and running GI/Copper conductor for grounding and (along with other wires in conduit system of wiring) using necessary suitable size clamps, nails, guttas/spacers etc. 8 SWG GI Wire	Mtr			30	6.0	180.00	30	180.00
25	Part A Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.	Each			12	96.0	1152.00	12	1152.00
26	Part A Fabricating, supplying and erecting swaged tubular pole of height ...Mtr having three sections, and providing two coats of red oxide paint and finished with two coats of enamelled paint of approved quality and colour and M.S. base plate of suitable size welded at the bottom of the pole(as per IS) and 40mm dia GI / flexible PVC pipe of 1 mtr length fitted to the heavy gauge polycarbonate control box including 5way connector of size 167x125x82mm for 7.5M pole/200x160x98mm for remaining length of pole with front opening cover, with locking arrangements and suitable capacity MCB / DP switch, The pole shall be erected in cement concrete work (1:2:4) including excavation and refilling of planting depth of the pole to the ground level and the coping CC shall be up to 0.6M above ground level as per IS 2713 - 7. 4.1.1) 9Mt (5Mt Hb,165.1mm dia 4.85mm thick x2M Hm, 139.7mm dia 4.50mm thick x 2M Ht,114.3mm dia 3.65mm thick) as per IS 410 SP 32	Each			16	10998.0	175968.00	16	175968.00

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AEE (Ele.)

	Items Grouped under sub Heads and sub works of the Estimate	Unit	Previous Measure		Present Measurement			Total Up to date	
			Qty	Cost	Qty	Rate Rs Ps	Amount Rs ps	Qty	Cost
27	Part A Fabricating, supplying and erection of ...Mtrs long hot dip Galvanized Octagonal pole with BSEN 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangements, including suitable boards, Bakelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 47 m/sec for .....Mtrs pole in single section and single joint welded as per IS 9595/IS 10178AWS having dimensions bottom .....mm, top....mm with 3mm thick, suitable base plate and 4Nos of long J bolts along with template and the pole shall be hot dip galvanized in single dipping with not less than 65micron as per ASTM-A123 and 153 etc., (excluding foundation) as per drawing appended. 4.2.6) 8 meters - Top 70mm and bottom 135mm dia	Each			3	9999.0	29997.00	3	29997.00
28	Part A Supplying and fixing telescopic M.S. bracket fabricated by using 0.5m length 4" dia telescopic M. S. pipe, with 2" dia 1.5m long M. S. bracket and are welded with suitable angle, using 6mm thick M. S. sheet, grip bolts & nuts, as required, suitable for 9 to 12 Mtrs. M. S. tubular pole, with necessary two coats of painting, with all other accessories. 14.4.1) Single bracket 1.5 Mtr. Length	Each			16	564.0	9024.00	16	9024.00
29	Part A Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency> 130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source. 12.8) LED Streetlight 90 Watts	No			5	4111.0	20555.00	5	20555.00

	Items Grouped under sub Heads and sub works of the Estimate	Unit	Previous Measure		Present Measurement			Total Up to date	
			Qty	Cost	Qty	Rate Rs Ps	Amount Rs ps	Qty	Cost
30	Part A Wiring for lighting/power circuit using one of PVC insulated 1100V grade, stranded Aluminium wire single core in open or concealed system of wiring. 2.7.1) 4 sqmm	Mtr.			5	3.0	15.00	5	15.00
31	Part A Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments.1) 1.5 SQMM	Mtr.			87	6.0	522.00	87	522.00
32	Part A Supplying, and fixing of Hot dip Galvanized M.S.Bracket suitable for out door luminaries and mounted on Octagonal pole using necessary bolts, nuts etc., complete. Single Arm Bracket with 1000mm Standard 40/50MM dia	Each			8	956.0	7648.00	8	7648.00
	Sub total -part-A						**491604.00**		
33	Part B Supplying and stringing of 1.1KV grade Aerial Bunched Cable Stranded & Compacted Aluminum Phase Conductor, and Stranded Messenger Conductor with all aluminum Alloy, Phase Conductor is insulated with XLPE Compound, insulated Messenger with specified IS-14255:1995 & confirming to GTP of GROUP-A. 1_ 2 X 16 + 1 X 25 SQ.MM	Per Mtr			2197	92.0	202124.00	2197	202124.00
34	Part B Suspension Clamp Assembly 16 to 70 mm (Excluding pole clamp & Eye Hook)	Set			70	145.0	10150.00	70	10150.00
35	Part B Dead End Clamp/Anchor Clamp Assembly 25 to 95 Sqmm (excluding pole clamps and Eye hook)	Set			6	196.0	1176.00	6	1176.00
36	Part B Universal Hook, Bolts & nuts including fixing charges	No			70	156.0	10920.00	70	10920.00
37	Part B Piercing connector suitable for 16 Sqmm - 95 Sqmm AB Cable - Street Light Connections including fixing charges	No			70	158.0	11060.00	70	11060.00
38	Part B Supplying and fixing of Pole clamp for LT Cable	Set			70	196.0	13720.00	70	13720.00
	Total						**249150.00**		**740754.00**
	Add 12% GST Part A Only						**58992.00**		
	Total Bill Amount						**799746.00**		
	Seven Lakhs Ninety Nine Thousand Seven Hundred Forty Six Only								

Certifiacte:

1.Certified that work is Executed Satisfactorily.

AEE. (Ele.)